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Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

1

of

1

**Complete if Known**

Application Number	10/061,941
Filing Date	February 1, 2002
First Named Inventor	Pereira, J.
Group Art Unit	2185
Examiner Name	
Attorney Docket Number	N1-P113

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**OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS**

Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
KW		J. DA SILVA and I. WATSON, "Pseudo-Associative Store with Hardware Hashing," IEE Proceedings, Computers and Digital Techniques, Vol. 130, Pt. E, No. 1, January 1983, pp. 19-24	
KW		D. KNUTH, "The Art of Computer Programming, Volume 3, Sorting and Searching, Second Edition," Addison Wesley Longman, 1998, pp. 541-545	
KW		V. SRINIVASAN, S. SURI and G. VARGHESE, "Packet Classification using Tuple Space Search," Proceedings of SIGCOMM, 1999, pp. 135-146	
KW		Z. CAO, Z. WANG and E. ZEGURA, "Performance of Hashing-Based Schemes for Internet Load Balancing," Proc. IEEE INFOCOM 2000, Conf. on Computer Comm., Vol. 1, 19th Annual Joint Conf. of the IEEE Computer and Comm. Soc., Tel Aviv, Israel, March 26-30, 2000, pp. 1-10	
KW		A. BRODER and M. MITZENMACHER, "Using Multiple Hash Functions to Improve IP Lookups," Proceedings of IEEE INFOCOM, 2001, pp. 1454-1463	

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<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a checkmark here if English language Translation is attached.

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## ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18  
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Title of Invention	Content Addressable Memory Device																																																																																																																								
<p>Application Number: 10/061941</p> <p>Confirmation Number: 8777</p> <p>First Named Applicant: Pereira Jose</p> <p>Attorney Docket Number: NLMI.P113</p> <p>Art Unit: 2185</p> <p>Search string: ( 4152762 or 4813002 or 4958377 or 5129074 or 5386413 or 5414704 or 5440715 or 5485418 or 5515370 or 5642322 or 5818786 or 5870324 or 5920886 or 5999435 or 6006306 or 6011795 or 6098147 or 6161144 or 6199140 or 6289414 or 6362992 or 6370613 or 6389506 or 6499081 or 20030093616 ).pn.</p> <p><b>RECEIVED</b> JUN 18 2003 Technology Center 2100</p> <p><b>US Patent Documents</b></p> <p>Note: Applicant is not required to submit a paper copy of cited US Patent Documents</p> <table border="1"><thead><tr><th>init</th><th>Cite.No.</th><th>Patent No.</th><th>Date</th><th>Patentee</th><th>Kind</th><th>Class</th><th>Subclass</th></tr></thead><tbody><tr><td><input checked="" type="checkbox"/></td><td>1</td><td>4152762</td><td>1979-05-01</td><td>Bird et al.</td><td></td><td></td><td></td></tr><tr><td><input checked="" type="checkbox"/></td><td>2</td><td>4813002</td><td>1989-03-14</td><td>Joyce et al.</td><td></td><td></td><td></td></tr><tr><td><input checked="" type="checkbox"/></td><td>3</td><td>4958377</td><td>1990-09-18</td><td>Takahashi</td><td></td><td></td><td></td></tr><tr><td><input checked="" type="checkbox"/></td><td>4</td><td>5129074</td><td>1992-07-07</td><td>Kikuchi et al.</td><td></td><td></td><td></td></tr><tr><td><input checked="" type="checkbox"/></td><td>5</td><td>5386413</td><td>1995-01-31</td><td>McAuley et al.</td><td></td><td></td><td></td></tr><tr><td><input checked="" type="checkbox"/></td><td>6</td><td>5414704</td><td>1995-05-09</td><td>Spinney</td><td></td><td></td><td></td></tr><tr><td><input checked="" type="checkbox"/></td><td>7</td><td>5440715</td><td>1995-08-08</td><td>Wyland</td><td></td><td></td><td></td></tr><tr><td><input checked="" type="checkbox"/></td><td>8</td><td>5485418</td><td>1996-01-16</td><td>Hiraki et al.</td><td></td><td></td><td></td></tr><tr><td><input checked="" type="checkbox"/></td><td>9</td><td>5515370</td><td>1996-05-07</td><td>Rau</td><td></td><td></td><td></td></tr><tr><td><input checked="" type="checkbox"/></td><td>10</td><td>5642322</td><td>1997-06-24</td><td>Yoneda</td><td></td><td></td><td></td></tr><tr><td><input checked="" type="checkbox"/></td><td>11</td><td>5818786</td><td>1998-10-06</td><td>Yoneda</td><td></td><td></td><td></td></tr><tr><td><input checked="" type="checkbox"/></td><td>12</td><td>5870324</td><td>1999-02-09</td><td>Helwig et al.</td><td></td><td></td><td></td></tr><tr><td><input checked="" type="checkbox"/></td><td>13</td><td>5920886</td><td>1999-07-06</td><td>Feldmeier</td><td></td><td></td><td></td></tr><tr><td><input checked="" type="checkbox"/></td><td>14</td><td>5999435</td><td>1999-12-07</td><td>Henderson et al.</td><td></td><td></td><td></td></tr></tbody></table>		init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass	<input checked="" type="checkbox"/>	1	4152762	1979-05-01	Bird et al.				<input checked="" type="checkbox"/>	2	4813002	1989-03-14	Joyce et al.				<input checked="" type="checkbox"/>	3	4958377	1990-09-18	Takahashi				<input checked="" type="checkbox"/>	4	5129074	1992-07-07	Kikuchi et al.				<input checked="" type="checkbox"/>	5	5386413	1995-01-31	McAuley et al.				<input checked="" type="checkbox"/>	6	5414704	1995-05-09	Spinney				<input checked="" type="checkbox"/>	7	5440715	1995-08-08	Wyland				<input checked="" type="checkbox"/>	8	5485418	1996-01-16	Hiraki et al.				<input checked="" type="checkbox"/>	9	5515370	1996-05-07	Rau				<input checked="" type="checkbox"/>	10	5642322	1997-06-24	Yoneda				<input checked="" type="checkbox"/>	11	5818786	1998-10-06	Yoneda				<input checked="" type="checkbox"/>	12	5870324	1999-02-09	Helwig et al.				<input checked="" type="checkbox"/>	13	5920886	1999-07-06	Feldmeier				<input checked="" type="checkbox"/>	14	5999435	1999-12-07	Henderson et al.			
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15	6006306	1999-12-21	Haywood et al.
16	6011795	2000-01-04	Varghese et al.
17	6098147	2000-08-01	Mizuhara
18	6161144	2000-12-12	Michels et al.
19	6199140	2001-03-06	Srinivasan et al.
20	6289414	2001-09-11	Feldmeier et al.
21	6362992	2002-03-26	Cheng
22	6370613	2002-04-09	Diede et al.
23	6389506	2002-05-14	Ross et al.
24	6499081	2002-12-24	Nataraj et al.

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### US Published Applications

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init	Cite.No.	Pub. No.	Date	Applicant	Kind	Class	Subclass
1	1	20030093616	2003-05-15	Slavin			

### Signature

Examiner Name	Date
<i>Kevin Varghese</i>	1/13/04



<b>Substitute for Form 1449A/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  Page 1 of 2	<b>Application No.</b>	10/061,941
	<b>Filed</b>	2/1/2002
	<b>First Inventor</b>	Jose P. Pereira
	<b>Art Unit</b>	2185
	<b>Examiner</b>	
	<b>Atty. Docket No.</b>	NLMI.P113

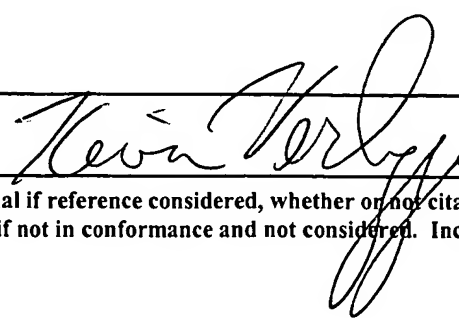
Foreign Patent Documents						
Examiner Initials*	Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication	Relevant Pages, Columns, Lines	Trans- lation
	Number	Kind				
KW	WO 01/11630	A1		2/15/2001		

Non Patent Literature Documents		
Examiner Initials	Name of Author, Title of Item, Date, Page(s), Volume-Issue Number(s), Publisher, City and/or Country where Published	Trans- lation
KW	SHAH, D. and GUPTA, P., "Fast Incremental Updates on Ternary-CAMs for Routing Lookups and Packet Classification," IEEE Micro, 21(1), January 2001, pp. 1-9	
KW	WALDVOGEL et al., "Scalable High-Speed Prefix Matching," ACM Transactions on Computer Systems, Vol. 19, No. 4, November 2001, pp. 440-482	
KW	KOBAYASHI, M. and MURASE, T., "A Processor Based High-Speed Longest Prefix Match Search Engine," IEEE 2001, pp. 233-239	
KW	HUANG et al., "A Fast IP Routing Lookup Scheme for Gigabit Switching Routers," IEEE 1999, pp. 1429-1436	
KW	HUANG, NEN-FU and ZHAO, SHI-MING, "A Novel IP-Routing Lookup Scheme and Hardware Architecture for Multigigabit Switching Routers," IEEE Journal on Selected Areas in Communications, Vol. 17, No. 6, June 1999, pp. 1093-1104	
KW	V. SRINIVASAN and G. VARGHESE, "Fast Address Lookups Using Controlled Prefix Expansion," ACM Transactions on Computer Systems, Vol. 17, No. 1, February 1999, pp. 1-40	
KW	GUPTA et al., "Routing Lookups in Hardware at Memory Access Speeds," Proc. Infocom, San Francisco, CA, April 1998, pp. 1-8	

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<i>KW</i>	WALDVOGEL et al., "Scalable High Speed IP Routing Lookups," SIGCOMM, Cannes, France, 1997, pp. 25-35	

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